

1 通

1 通

5 0 条の 3 の第 5 項の規定による命令に基づく フレキシブルディスクの提出書

特許庁長官 近藤隆彦 殿

- 1. 国際出願の表示 PCT/JP99/05175
- 2. 出 願 人(代表者)

名 称 味 の 素 株 式 会 社 AJINOMOTO CO., INC.

あて名 〒104-0031 日本国東京都中央区京橋1丁目15番1号 15-1, Kyobashi 1-Chome, Chuo-Ku, Tokyo 104-0031, JAPAN

3. 代 理 人

氏 名 5995 弁理士 中 村 稔 NAKAMURA Minoru

あて名- 〒100-8355 日本国東京都千代田区丸の内3丁目3番号 新東京ビル 646号

> Room 646, Shin-Tokyo Bldg., 3-1, Marunouchi 3-Chome, Chiyoda-Ku, TOKYO 100, JAPAN

- 4. 補正命令の日付 19.10.99
- 5. 提出する物件
 - (1)配列表に関するコードデータを記録したフレキシブルディスク 1枚
 - (2)陳述書
 - (3)フレキシブルディスクの記録形式等の情報を記載した書面

特許庁長官殿

本書に添付したフレキシブルディスクに記録した塩基配列またはアミノ酸配列は、明細書に記載した塩基配列またはアミノ酸配列を忠実にコード化したものであって、内容を変更したものでないことを陳述します。

平成 | 1年 | 1月 月 日

事件の表示

PCT/JP99/05175

発明の名称

アミノ酸生産菌の構築方法及び構築されたアミノ酸生産菌を 用いる醗酵法によるアミノ酸の製造法

代理人

中村 稔 🗓

フレキシブルディスクの記録形式等の情報を記載した書面

1 出願人名称

味の素株式会社

2 代理人氏名

中村 稔

3 事件の表示

PCT/JP99/05175

4 発明の名称

アミノ酸生産菌の構築方法及び構築されたアミノ酸 生産菌を用いる醗酵法によるアミノ酸の製造法

5 使用した文字コード

ASCII

6 配列を記録したファイル名

Sequence Listing

7 連絡先

東京都千代田区丸の内3丁目3番1号

中村合同特許法律事務所

電話番号

 $0\ 3-3\ 2\ 1\ 1-8\ 7\ 4\ 1$

担当者氏名

箱田 篤-

Sequence Listing

<110> Ajinomoto Co. Inc. <120> Method of constructing amino acid producing bacteria, and metho d of preparing amino acids by fermentation with the constructed amino acid producing bacteria <130> Y1G-0426 <160> 6 <210> 1 <211> 46 <212> nucleic acid <400> 1 ttaattettt gtggteatat etgegaeact geeataattt gaaegt <210> 2 <211> 46 <212> nucleic acid <400> 2 ttaattettt geggteatat etgegaeact geeataattt gaaegt <210> 3 <211> 46 <212> nucleic acid <400> 3 ttaattettt gtggteatat etgegaeact getataattt gaaegt <210> 4 <211> 46

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<210> 7

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lactofermentum

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lactofermentum

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<220> primer 2 for introducing a mutation of gltA promoter

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20

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30

Phe Ala Met Ile Arg Asp Gly Val Ala Ser Tyr Leu Asn Asp Ser Asp

25

ccg gag gag acc aac gag tgg atg gat tca ctc gac gga tta ctc cag 144

Pro Glu Glu Thr Asn Glu Trp Met Asp Ser Leu Asp Gly Leu Leu Gln

35 40 45

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50 55 60

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Arg Ala Ser Ala Lys Arg Val Ser Leu Pro Pro Met Thr Ser Thr Asp
65 70 75 80

tac gtc aac acc att cca acc tct atg gaa cct gaa ttc cca ggc gat 288

Tyr Val Asn Thr Ile Pro Thr Ser Met Glu Pro Glu Phe Pro Gly Asp

85 90 95

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Glu Glu Met Glu Lys Arg Tyr Arg Arg Trp Ile Arg Trp Asn Ala Ala

100 105 110

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Ile Met Val His Arg Ala Gln Arg Pro Gly Ile Gly Val Gly His

115 120 125

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Ile Ser Thr Tyr Ala Gly Ala Ala Pro Leu Tyr Glu Val Gly Phe Asn

130 135 140

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145	5				150)				15	5				160)
				•												
tto	cag	g ggc	cac	gc ē	tca	ı cca	ı ggt	ate	g tad	c gca	a cgt	c gca	ı tto	c at	g gag	52
Ph∈	Glr	n Gly	His	Ala	Ser	Pro	Gly	Met	: Туі	r Ala	a Arc	g Ala	Phe	e Met	Glu	
				165	· ;	•			170) .				17	5	
		•														
aat	. cac	ctt:	tet	gaa	gac	gat	ctc	gat	aac	· · ttc	. cat	cad	паа	att	tee	57(
					*											
O L y	nry	, дси			vab	иар	Неи			· FIIC	ALG	GIII			Ser	
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•																
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	₹.															

His Phe Phe Arg Gly Lys Asp His Pro Gly Gly Gly Asp Gln Ile Phe

atg gac gag cca gaa tca cgt ggt ctc atc cag cag gct gca ctg aac 816

Met Asp Glu Pro Glu Ser Arg Gly Leu Ile Gln Gln Ala Ala Leu Asn
260 270

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Asn Leu Asp Asn Leu Thr Phe Val Val Asn Cys Asn Leu Gln Arg Leu

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280

285

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290 295 300

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305 310 315 320

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325 330 335

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360

365

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Arg Gly Gly His Asp Tyr Arg Lys Val Tyr Ala Ala Tyr Lys Arg Ala

385 390 395 400

ctt gag acc aag gat cgc cca acc gtc atc ctt gct cac acc att aag 1248

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405

410

415

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420

425

430

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435

440

445

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450

450

460

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595

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605

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Ile Phe Tyr Ser Met Phe Gly Phe Gln Arg Thr Gly Asp Ser Ile Trp

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Ala Ala Ala Asp Gln Met Ala Arg Gly Phe Leu Leu Gly Ala Thr Ala

645 650 655

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Gly Arg Thr Thr Leu Thr Gly Glu Gly Leu Gln His Met Asp Gly His

660 665 670

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Ser Pro Val Leu Ala Ser Thr Asn Glu Gly Val Glu Thr Tyr Asp Pro

675

680

685

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715 720

•

705

710

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725

730

735

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740

745

750

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755

760

765

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785 790 795 800

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805

810

815

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Ser Asp Phe Ser Thr Asp Leu Pro Asn Gln Ile Arg Glu Trp Val Pro

835

840

845

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850

855

860

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885 890 895

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5 10	

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2440
Ser Asp Asp Ser Asn Phe Ala Met Ile Arg Asp Gly Val Ala Ser Tyr

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25

ttg aac gac tca gat ccg gag gag acc aac gag tgg atg gat tca ctc 2488

Leu Asn Asp Ser Asp Pro Glu Glu Thr Asn Glu Trp Met Asp Ser Leu

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Asp Gly Leu Leu Gln Glu Ser Ser Pro Glu Arg Ala Arg Tyr Leu Met

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ctt cgt ttg ctt gag cgt gca tct gca aag cgc gta tct ctt ccc cca 2584

Leu Arg Leu Leu Glu Arg Ala Ser Ala Lys Arg Val Ser Leu Pro Pro
60 65 70 75

	•		
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Met Thr Ser Thr Asp Tyr	Val Asn Thr Ile Pro	o Thr Ser Met Glu Pro	
. 80	85	90	
gaa ttc cca ggc gat gag	gaa atg gag aag cgt	tac cgt cgt tgg att	2680
Glu Phe Pro Gly Asp Glu	Glu Met Glu Lys Arg	Tyr Arg Arg Trp Ile	
95	100	105	
cgc tgg aac gca gcc atc	atg gtt cac cgc gct	cag cga cca ggc atc	2728
Arg Trp Asn Ala Ala Ile	Met Val His Arg Ala	Gln Arg Pro Gly Ile	
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ggc gtc ggc gga cac att		_	2776
Gly Val Gly Gly His Ile		Ala Ala Pro Leu Tyr	•
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		·	
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Glu Val Gly Phe Asn His I		Asp His Pro Gly Gly	
140 145	150	155	
		•	
gge gae cag ate tte tte c		-	2872
Gly Asp Gln Ile Phe Phe G			
160	165	170	
egt gea tte atg gag ggt e	•		2920
Arg Ala Phe Met Glu Gly A			
175	180	185	
agt and an att tax art -			2052
egt cag gaa gtt tee egt g	ay cag ggt ggc att c	beg tee tae eet eac	2968

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cc	a ca	c gg	t at	g aaq	g gad	tto	tgg	g ga	j tto	C CC8	a act	gto	g too	ate	g ggt	3016
Pro	o Hi	s Gl	y Met	Lys	s Asp	Phe	e Trp	Glu	ı Phe	e Pro	Thr	: Val	. Sei	. Met	t Gly	7
	20)5				210	•				215	5				
cti	t ggd	2 008	a ato	g gat	gac	att	tac	cag	g gca	ı cgt	ttc	aac	cgo	tac	cto	3064
Leu	ı Gly	y Pro	Met	: Asp	Ala	Ile	Tyr	Glr	a Ala	Arg	Phe	Asn	Arg	ı Tyr	Leu	L
220)				225					230)				235	j
													,			
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Glu	Asr	a Arg	, Gly	· Ile	Lys	Asp	Thr	Ser	Asp	Gln	His	Val	Trp	Ala	Phe	
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Gln	Ala	Ala	Leu	Asn	Asn	L <i>e</i> u	Asp	Asn	Leu	Thr	Phe	Val	Val	Asn	Cys	
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Asn	Leu	Gln	Arg	Leu	Asp	Gly	Pro	Val	Arg	Gly	Asn '	Thr :	Lys	Ile	Ile	
	285					290					295			•		
caq	gaa	ctc	gag	tee	ttc	ttc	cgt (qqc	qca	ggc '	tgg t	ct (ata a	atc .	aaq	3304
											rp s		-		_	
300					305		,	•		310	_		•		315	
								20	/35							
									,							

Arg Gln Glu Val Ser Arg Glu Gln Gly Gly Ile Pro Ser Tyr Pro His

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	Val	Val	Trp	Gly	Arg	Glu	Trp	Asp	Glu	Leu	Leu	Glu	Ly:	s Asj	o Gli	n Asp	1	
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	Thr	Phe	Lys	Ala	Asn	Asp	Gly	Ala	Tyr	Val	Arg	Glu	His	Phe	Ph∈	e Gly		
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•		•												,				2406
•	_	_		-												gaa		3496
	Arg	Asp	Pro	Arg	Thr	Ala	Lys	Leu	Val	Glu	Asn	Met	Thr	Asp	Glu	Glu		
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	Ile	Trp	Lys	Leu	Pro	Arg	Gly	Gly	His	Asp	Tyr	Arg	Lys	Val	Tyr	Ala		
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	Ala	Tyr	Lys	Arg	Ala	Leu	Glu	Thr	Lys	Asp	Arg	Pro	Thr	Val	Ile	Leu		
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							+	~~~	a+a	~~~			++-		~~~	aat		3640
	_										cac							3040
	Ala	His	Thr	Ile	Lys	Gly	Tyr	Gly		Gly	His	Asn	Phe	Glu	Gly	Arg		
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Phe	Arg	J Asp	Lys	Gln	Gly	Ile	Pro	Ile	e Thr	Asp	Glu	Glr	Le	ı Glu	ı Lys		
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Asp	Pro	Tyr	Leu	Pro	Pro	Tyr	Tyr	His	Pro	Gly	Glu	Asp	Ala	Pro	Glu		
460			*		465		•			470)				475		
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Ile	Lys	Tyr	Met	Lys	Glu	Arg	Arg	Ala	Ala	Leu	Gly	Gly	Tyr	Leu	Pro	;	
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Glu	Arg	Arg	Glu	Asn	Tyr	Asp	Pro	Ilė	Gln	Val	Pro	Pro	Leu	Asp	Lys		•
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ctt	cgc	tct	gtc	cgt	aag	ggc	tcc	ggc	aag	cag	cag	atc	gct	acc	act		3928
Leu	Arg	Ser	Val	Arg	Lys	Gly	Ser	Gly	Lys	Gln	Gln	Ile	Ala	Thr	Thr		
		510	,		· .		515			•	. :	·520		,			. •
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_			_								-				ttg	,	3976
Met	Ala	Thr	Val	Arg	Thr	Phe	Lys	Glu	Leu	Met	Arg	Asp	Lys	Gly	Leu		
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Ala	qeA	Arg	Leu			Ile	Ile	Pro	Asp		Ala	Arg	Thr	Phe	Gly		
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Asn Ala Thr His Gln Met Lys Lys Leu Thr Leu Asp Asp Leu Lys Leu

ctt	gac	tct	. tgg	tto	cca	acc	ttg	aag	gato	tac	aac	c cc	g ca	e gg	t caç	Į.	407	2
Let	Asp	Ser	Trp	Phe	Pro	Thr	Leu	Lys	s Ile	e Tyr	: Asr	ı Pro	o Hi	s Gl	y Glr	1		
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cct	gaa	gga	cag	atc	ctg	cac	gaa	ggc	atc	aac	gag	gct	: ggt	tec	gtg		4168	3
Pro	Glu	Gly	Gln	Ile	Leu	His	Glu	Gly	Ile	Asn	Glu	Ala	Gly	Ser	. Val			
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_															gcc		4216	į
Ala	Ser	Phe	Ile	Ala	Ala	Gly	Thr	Ser	Tyr	Ala	Thr	His	Gly	Lys	Ala			
٠.	605		•			610					615							
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_															acc		4264	
	Ile	Pro	Leu	Tyr		Phe	Tyr	Ser	Met		Gly	Phe	Gln	Arg				
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															cag		4360	
Leu	Gly	Ala		Ala	GIÀ	Arg			Leu	Thr	GLY			Leu	GIn			
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CaC	atg	gat	gga	cac	tcc	cct	gtc	ttg	gct	tcc	acc	aac	gag	ggt	gtc		4408	

His Met As	p Gly His	s Ser Pro	Val Leu A	Ala Ser Thr	Asn Glu Gly	Val
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Glu Thr Ty	r Asp Pro	Ser Phe i	Ala Tyr G	Slu Ile Ala I	His Leu Val	His
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Tyr Tyr Ile	Thr Ile	Tyr Asn G	lu Pro Ti	hr Pro Gln P	Pro Ala Glu I	Pro
	720	o .	. 7	725	730	
						•
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Glu Gly Leu	Asp Val	Glu Gly L	eu His Ly	ys Gly Ile T	yr Leu Tyr S	Ser
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780 785 790 795

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Arg Asp G	ly Ala Ala	a Arg Asn Ly	s Ala Gln Le	u Arg Asn Pro Gly Ala	
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* *					
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Asp Ala Gl	y Glu Ala	Phe Val Th	r Thr Gln Le	u Lys Gln Thr Ser Gly	
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):-					
cca tac gt	t gca gtg	tet gae tte	c tcc act gat	t ctg cca aac cag atc	4888
Pro Tyr Va	l Ala Val	Ser Asp Pho	e Ser Thr Asp	Leu Pro Asn Gln Ile	
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Arg Glu Tr	p Val Pro	Gly Asp Tyr	Thr Val Leu	Gly Ala Asp Gly Phe	
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Gly Phe Ser	Asp Thr	Arg Pro Ala	Ala Arg Arg	Phe Phe Asn Ile Asp	
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Ala Glu Ser	· Ile Val	Val Ala Val	Leu Asn Ser	Leu Ala Arg Glu Gly	
•	880		885	890	
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aag atc gac	gtc tcc	gtt get get	cag gct gct	gag aag ttc aag ttg	5080
Lys Ile Asp	Val Ser	Val Ala Ala	Gln Ala Ala	Glu Lys Phe Lys L <i>e</i> u	Ü
. *	895		900	905	
				•	
gat gat cct	acg agt q	gtt tee gta	gat cca aac	got cot gag gaa taaat '	5130
		- X			

920

910

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29/35

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